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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------|-------------|----------------------|---------------------|------------------|
| 09/420,334      | 10/18/1999  | STEVEN D. LACY       | 10555/004001        | 2647             |

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REDWOOD CITY, CA 94063

EXAMINER

MARSCHER, ARDIN H

| ART UNIT | PAPER NUMBER |
|----------|--------------|
|----------|--------------|

1631

18

DATE MAILED: 06/30/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/420,334

Applicant(s)

LACY ET AL.

Examiner

Ardin Marschel

Art Unit

1631

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 24 March 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-78 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-78 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) 5 sheets
- 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

### **DETAILED ACTION**

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after allowance or after an Office action under *Ex Parte Quayle*, 25 USPQ 74, 453 O.G. 213 (Comm'r Pat. 1935). Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, prosecution in this application has been reopened pursuant to 37 CFR 1.114. Applicant's submission filed on 3/24/03 and 6/2/03 have been entered.

The art unit designated for this application has changed. Applicant(s) are hereby informed that future correspondence should be directed to Art Unit 1631.

Applicants' arguments, filed 3/24/03, have been fully considered but they are not deemed to be persuasive. Rejections and/or objections not reiterated from previous office actions are hereby withdrawn. The following rejections and/or objections are newly applied. They constitute the complete set presently being applied to the instant application.

### **VAGUENESS AND INDEFINITENESS**

Claims 1-78 are rejected, as discussed below, under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claim 1, lines 3-5, the word "source" is defined but notably without this being utilized thereafter in the claim. Instead, in claim 1, last 2 lines, the sources are represented only. It is confusing as to whether the source(s) is(are) actually being

Art Unit: 1631

mapped or whether only the "electronic data" in lines 6-7 of claim 1 is utilized in the claimed method. This unclarity is also present in claims 19, 30, 36, 37, 55, 66, and 72, and those dependent therefrom, due to their dependence as well as those dependent from claim 1. Clarification via clearer claim wording is requested.

### **PRIOR ART**

The following is a quotation of 35 U.S.C. § 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. § 103, the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 C.F.R. § 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of potential 35 U.S.C. § 102(f) or (g) prior art under 35 U.S.C. § 103(a).

Claims 1-78 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Flavin et al.(P/N 6,044,212) taken in view of Schultz et al.(P/N 6,004,617).

In the abstract Flavin et al. summarizes that the disclosed invention is directed to combinatorial chemistry in a computer controlled design method as is also the purpose of the above listed instant claims. In column 4, lines 7-14, the combinatorial synthesis complexity is reinforced by citing the number of reagents as being in the hundreds etc.

Art Unit: 1631

Prior to reagent dispensing the software program, resident in either RAM or ROM, first designs or determines the initial values of reagent concentrations and the type of reagents for each well as summarized in column 5, lines 24-28. This is a generic statement that lacks details as to what these initial values may be but clearly is directed to combinatorial library preparation. Such a generic setting up of initial values motivates someone wishing to perform such a procedure to look to wherever combinatorial library reagents, values, etc. would be found which must be in other references in the prior art since no significant detail is supplied for such initial values etc. are present in the reference. The reagent values and types are stored in a parameter look-up table in the computer memory as stated in column 5, lines 46-51. Several optional automatic repetitive reaction runs and analyses are then disclosed in the reference. The displaying of the scores and data from the library of reaction materials is disclosed in column 8, lines 37-41, which also notes that each step in the methodology can be updated for the operator to be informed of the current reaction. The reference is focused on the computer design of reactions for a combinatorial library and lacks significant detail regarding the various library material components that may be utilized as well as the output of data or scores regarding the libraries made thereby. Thus, practices from the prior art must be performed and are therefore motivated for both the details of combinatorial library reagents as well as data output for a library that is prepared.

Schultz et al. is a reference which focuses on these additional details which are needed for combinatorial library preparation and data display. It is noted that Schultz et

al. also deposits library material at regions on a substrate or destination(s) as summarized in column 7, lines 13-48, as does the instant invention. A wide variety of material combinations are optional in Schultz et al. for library preparation as set forth in column 7, line 56, through column 9, line 40, which are clearly inclusive of a variety of chemical entities such as utilized in combinatorial libraries. The preparation of the libraries of Schultz et al. occurs via a number of options, however, the robotic or automated methodology as of Flavin et al. is suggested and motivated in column 12, lines 30-38, of Schultz et al. The utilization of gradient application of source materials for library preparation is cited at several locations throughout Schultz et al., for example, at column 10, lines 30-33, column 11, lines 8-11, column 33, lines 17-35, and in a specific example in Figures 18, 19A, and 19B. A variety of reaction conditions for various library regions is also described, for example, in columns 3-4, bridging paragraph. The Figure 18, 19A, and 19B description is of particular note because they depict both gradient deposition of library materials in a rectangular region as well as graphical display of the representations or analyses of the library so prepared.

Thus, it would have been obvious to someone of ordinary skill in the art at the time of the instant invention to perform the Flavin et al. automated/robotic combinatorial design method which requires details of library preparation and data display with a reference such as Schultz et al. which supplies details of library preparation, such as gradient practice, as well as graphical display of library representations to result in the practice of the instant invention.

### INFORMATION DISCLOSURE STATEMENT

Enclosed are several sheets of PTO Form 1449 with initials etc. Several citations on this form was lined through due to a lack of a date of publication as required for such citations.

No claim is allowed.

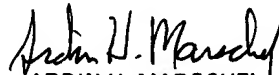
Papers related to this application may be submitted to Technical Center 1600 by facsimile transmission. Papers should be faxed to Technical Center 1600 via the PTO Fax Center located in Crystal Mall 1. The faxing of such papers must conform with the notices published in the Official Gazette, 1096 OG 30 (November 15, 1988), 1156 OG 61 (November 16, 1993), and 1157 OG 94 (December 28, 1993)(See 37 CFR § 1.6(d)). The CM1 Fax Center number is either (703)308-4242 or (703)305-3014.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ardin Marschel, Ph.D., whose telephone number is (703)308-3894. The examiner can normally be reached on Monday-Friday from 8 A.M. to 4 P.M.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Woodward, Ph.D., can be reached on (703)308-4028.

Any inquiry of a general nature or relating to the status of this application should be directed to Legal Instrument Examiner, Tina Plunkett, whose telephone number is (703)305-3524 or to the Technical Center receptionist whose telephone number is (703) 308-0196.

June 27, 2003

  
ARDIN H. MARSCHEL  
PRIMARY EXAMINER